

## REMARKS

Claims 15, 21-22, 25, 26 and 48-54 are pending in the application. Claim 18 has been withdrawn from consideration. Claim 15 has been amended. Claims 50-54 are newly added. Support for new claims 50-54 is found in the specification at page 1, lines 24-31, page 4, lines 15-18, page 5, lines 15-23, page 7, lines 15-29, page 12, lines 30-32, page 13, lines 1-13, page 15, lines 4-15. No new matter has been added. Applicants will cancel non-elected claims upon indication of a notice of allowance.

**Claims 15, 21-22, 25, 26, 48 and 49 have been rejected under 35 USC §112, first paragraph as allegedly containing new matter.**

Applicants discussed this rejection with the Examiner in the interview on October 22, 2003. Applicants have changed the language of “having” to “consisting of” in claim 15. However, Applicants have added claims 50-51 and assert that support for these claims is found in the specification at page 1, lines 24-31, page 4, lines 15-18, page 5, lines 15-23, page 7, lines 15-29, page 12, lines 30-32, page 13, lines 1-13, page 15, lines 4-15. Applicants are claiming a CS3 peptide (not the whole protein) that is immunogenic. Applicants have determined if the peptide binds to the molecular model, it will be immunogenic because it has the properties that make it immunogenic.

Table 1 shows that peptides that bind in the molecular model also bind in bioassays. Figs. 31 and 32 also show binding in bioassays of peptides that bind in the model. It is believed that the subject matter of the present claims is supported by the specification as filed and that this rejection is overcome.

**Claims 15, 21-22 and 48 have been rejected under 35 USC §102(a) as allegedly anticipated by Nauss et al. Journal of Immunology, vol. 150/No. 8, No. 221 (April 15, 1993) in view of the specification pages 12-13.** Applicants respectfully traverse this rejection.

The present application claims priority of serial no. 08/064,559 filed May 21, 1993. A copy of that application was submitted on April 16, 2003. The Examiner asserted in the interview that there is a different inventive entity in the Nauss et al. reference. The authors of the cited reference are Nauss, Reid and Schaharazade. The listed inventors in this application as filed are Nauss, Reid, Schaharazade and Wolf.

Submitted herewith is a Statement Requesting the Deletion of name of a person (Wolf) who is not an inventor of the invention being claimed under MPEP 602.06. The subject matter of the claims that related to Wolf has been deleted. Specifically, the peptides CS6 $\Delta$ 7 having the amino acid sequence of IIYQIVDEKGKKK, Seq. ID No: 6, CS6 $\Delta$ 6 having the amino acid sequence of DEYGLGRLVNTAD, Seq. ID No: 5, CS6E5 having the amino acid sequence of GTYAGHLTVSFYS, Seq. ID No: 12, CS6E4 having the amino acid sequence of GEYPNSGYSSGTY, Seq. ID No: 11, CS6E3 having the amino acid sequence of TSYTFSAIYTGGE, Seq. ID No: 10, and CS6E2 having the amino acid sequence of QLYTVEMTIPAGV, Seq. ID No: 9 have been deleted from claim 15. Wolf is now not an inventor of the subject matter being claimed. This rejection is now believed overcome because the subject matter was not known or used by others before the invention as required by section 102(a).

**Claims 15, 21-23, 25, 26, 48-49 have been rejected under 35 USC 103(a) as allegedly unpatentable over Nauss et al, Journal of Immunology, and the specification pages 12-13 in view of Reid, et al.** Applicants respectfully traverse this rejection.

The Nauss et al. article has been eliminated as a reference due to the cancellation of subject matter from claim 15 and the submission of a Statement Requesting the deletion of the inventor Wolf, as discussed immediately above. Therefore, this rejection is believed overcome.

**Claims 15, 21-23, 25, 26, 48 and 49 have been rejected under 35 USC §102(e) as anticipated by Reid et al. US Pat. No. 5,417,986 filed April 10, 1992. Applicant respectfully traverses this rejection.**

Reid, et al. '986 discloses the use of CS3 proteins. The present application is directed to a CS3 peptide with a specific sequence (claim 15) a peptide that is not the whole CS3 protein (claim 51) a synthetic CS3 peptide that has been modified from the natural CS3 peptide sequence (claim 53), and a CS3 peptide fragment that binds to a Class II MHC receptor DR1 (claim 54). The nomenclature selected is intended to make clear that the peptides claimed are fragments and not the whole natural CS3 protein that is set forth in Reid et al.

The peptides (also known as protein fragments) have a physical property that they bind to the Class II MHC receptor DR1. This is not an intended use but an actual property of the peptide. There is no disclosure in Reid, et al. '986 that the entire protein binds to the Class II MHC receptor DR1. This rejection is now believed overcome.

Claims 15, 21-22, 25, 26, 48 and 49 have been rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-25 of U.S. patent No. 6,309,669. A terminal disclaimer is filed herewith. This rejection is now believed obviated.

Applicants kindly request reconsideration of claim 18 as being directed to elected subject matter if the base claim is found allowable.

Reconsideration and allowance are respectfully requested.

Date: *Oct. 31, 2003*

Respectfully submitted,

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